based on WHO anatomical therapeutic chemical (ATC) classification system and Defined daily doses (DDDs) per 1000 patients were calculated. Type and class of prescribed antibiotics and adherence to the generic name prescribing and National list of essential medicines of India (NLEMI) were analyzed.

**Results**: Overall, 20303 patients were admitted in the medicine departments of two hospitals, of which 66% were prescribed antibiotics. Malaria or viral fever was diagnosed in 693 patients in the TH and 1177 in the NTH. Of these, 82% patients at the TH and 71% at the NTH (71%, p<0.001) were prescribed antibiotics. Prescriptions made at the TH show more adherence both towards the use of generic names and the NLEMI, compared with the NTH (p<0.001). Most commonly prescribed antibiotic classes at the TH were fluoroquinolones (48%) and third generation cephalosporins (21%) and at the NTH were third generation cephalosporins (47%), and fixed dose combinations (19%). The most prescribed antibiotic substances at the TH was ciprofloxacin (1940 DDD/1000 patients), and at the NTH was ceftriaxone (1052 DDD/1000 patients).

**Conclusion**: Frequent and unnecessary antibiotic prescribing practices at both hospitals were observed. Significantly high percentage of patients in non-bacterial infection groups i.e. malaria and viral fever, were prescribed antibiotics which is a point of concern. An urgent need is felt to develop and implement relevant antibiotic stewardship program to rationalize the antibiotic prescribing in the settings.

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## Adherence to antiretroviral drug treatment ARV among people living with HIV/AIDS: A study from Eastern Nepal

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**Background**: **Background:** HIV/AIDS has threatened an enormous worldwide challenge on the survival of mankind. Antiretroviral therapy (ART) for HIV is increasingly being introduced and utilized in diverse areas of the world. However, little research exists on adherence to ART in different cultural settings, particularly in developing countries such as Nepal. This study aimed to determine adherence to ART and identify associated factors with adherence among people with HIV/AIDS and receiving ART/ARV therapy.

**Methods & Materials**: **Methods and materials:** In this cross sectional study total of 300 HIV positive subjects were interviewed using semi-structured questionnaire. Study subjects were randomly selected from different HIV clinics of three districts; Sunsari, Morang and Jhapa of Eastern Nepal. Informed & understood written consent was taken and cofidenciality was mentained throughout of the study.

**Results**: **Results**: The median age for patients was 34 yr. Majurity of the respondents were using a non protease inhibitor (PI) treatment regimen (98%). Mean 4-day adherence was 92%. Adherence was lower over longer periods of recall; Twenty percent reported missed does over the past 7 days; 33% reported ever missing a full day's medications and 16% had a treatment interruption of more than 7-days at least once. On univariate analysis less than university education, being unemployed, obtaining free treatment, severe depression, hospitalization >2 times, having moderate to severe side-effects and taking 4 or more medicines were associated with lower adherence (<90%). However, only obtaining free treatment (adjusted OR, 4.05, 95% CI 1.42-11.54, P=0.009) and severe depression (adjusted OR 4.48, 95% CI 1.64-12.27, P=0.003) were associated with lower adherence in multivariate analysis.

**Conclusion**: **Conclusion:** Although the overall adherence was high, lower levels of adherence were documented among poor patients receiving free ARV/ART. Provision of free treatment of ART and side effect management should make available up to unreached poor people of community.

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## The antimicrobial and phytochemical analysis of the leaves of aspilia africana on clinical isolates

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**Background**: The uses of medicinal plants for treatment of various infections in traditional communities have been an age-long practice. This provides the rationale to study medicinal plant extracts as a possible source of alternative therapy against infections.

**Methods & Materials**: The current study was undertaken to evaluate the phytochemical and antimicrobial properties of *Aspilia africana*. The antimicrobial activity and minimum inhibitory concentration (MIC) of the extracts of *Aspilia Africana* were evaluated against eight organisms-*Staphylococcus aureus, Escherichia coli, Pseudomonas aureginosa, Salmonella typhi, Candida albicans, Aspergillus niger, Penicillum* spp *and Fusarium* spp. The ethanolic and aqueous extracts were obtained by standard methods. Antimicrobial activity was conducted using a modified agar well diffusion method.

**Results**: The phytochemical screening and analysis carried out in this study showed that the plant extracts contains alkaloids (6.35%), saponins (3.26%), flavonoids (2.01%), tannins(0.88%) and phenols (0.11%). The result showed that ethanolic extract of *Aspilia africana* exerted antimicrobial effect on the test organisms at 25mg/ml, 50mg/ml and 100mg/ml concentrations, while the hot aqueous extract exerted antimicrobial effect at 100mg/ml only on *Staphylococcus aureus* and *Pseudomonas aureginosa*. The ethanolic extract of *Aspilia Africana* showed the highest antimicrobial activity with diameter of zone of inhibition of 3.35mm to 17.9mm at 100mg/concentration. The minimum inhibitory concentration (MIC) of the ethanolic extracts was at a concentration of 25mg/ml.